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10/710,932	08/13/2004	Hsin-Tai Wu	AUOP0029USA	4931
27765	7590	09/26/2007		
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			EXAMINER DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	
			NOTIFICATION DATE	DELIVERY MODE
			09/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/710,932

Applicant(s)

WU ET AL.

Examiner

Thoi V. Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 ~~is/are~~ rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/20/06 & 2/9/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 1-11 in the reply filed on September 03, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Accordingly, claims 12-20 were cancelled and claims 1-11 are considered in this application.

Claim Objections

2. Claim 10 is objected to because of the following informalities: in line 2, the recitation "another plurality of first bounding pads" should be --a plurality of bounding pads-- since claim 10 is dependent on claim 1 and claim 1 does not recite any bounding pads. Appropriate correction is required.

3. Claim 10 is objected to because of the following informalities: claim 11 recites the limitation "the first flexible driving IC" in line 6. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

4. Claim 11 is objected to because of the following informalities: in line 3, the recitation "another plurality of second bounding pads" should be --a plurality of bounding pads-- since claim 11 is dependent on claim 2, which is dependent on claim 1, and claims 1 and 2 do not recite any first bounding pads. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 11 is dependent on claim 2 and claim 2 is dependent on claim 1. Claim 11 recites the limitation "another plurality of second bounding pads located on the third shorting bars between two neighboring second mounting areas for electrical connecting a second flexible printed circuit to the first, the second, and the third shorting bars between the two second driving IC mounting areas, wherein the second flexible printed circuit is for inputting a signal to the first driving IC." This implies that the plurality of second bounding pads are used to electrically connect the first shorting bar, the second shorting bar, the third shorting bar, the second flexible printed circuit, the first driving ICs, the second driving IC altogether. However, according to claims 1 and 2, the first and second shorting bars are received the signals from the first driving ICs and the third shorting bar is received the signal from the second driving IC. Thus, claim 11 is unable for one skilled in the art to make and/or use the invention for performing a liquid cell test because of the mixed electrical signals between the first driving ICs and the second driving IC.

7. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The specification does not describe another plurality of second bounding pads located on the third shorting bars between two neighboring second driving IC mounting areas for electrically connecting a second flexible printed circuit to the first, the second, and the third shorting bars between the two second driving IC mounting areas, wherein the second flexible printed circuit is for inputting a signal to the first driving IC. As shown in Fig. 7 of the specification, a scanning line driving IC mounting area 50 is a second driving mounting area, a plurality of second bounding pads 68 is connected to the shorting bars 60a and 60b at the second driving mounting area 50, and another plurality of first bounding pads 64 electrically connect a second flexible printed circuit 59 to the first, second and third shorting bars 54a, 54b and 54c, wherein the second flexible circuit board is located between the two first driving IC mounting areas 52 and the second flexible circuit board is for inputting a signal to the first (data line) driving IC (paragraph 32).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohgiichi et al. (Ohgiichi, US 7,129,998 B2).

Re claim 1, as shown in Figs. 1, 2 and 6, Ohgiichi discloses a liquid crystal display panel with a test cell structure comprising:

- a substrate SUB1;

- a plurality of first driving IC mounting areas DDR formed on the surface of the substrate for mounting a first driving IC separately;

- a plurality of first conductive wires in parallel (vertical wires R1 in Fig. 15(a));

- a plurality of second conductive wires in parallel (vertical wires G1 in Fig. 15(a)) with and interlaced with the first conductive wires on the substrate SUB1 for receiving the signals from the first driving ICs DDR;

- a first shorting bar C8 connected to the first conductive wires and passing through all of the first driving IC mounting areas DDR; and

- a second shorting bar C6 connected to the second conductive wires and passing through all of the first driving IC mounting areas DDR.

Re claim 2, as shown in Figs. 1 and 2, the surface of the substrate SUB1 contains at least one second driving mounting area GDR that is used for mounting one second driving IC, the test structure further comprising:

a plurality of third conductive wires (gate lines) perpendicular to the first and second conductive wires located on the substrate for receiving the signals from the second driving IC GDR (Fig. 6); and

a third shorting bar C3 connected to the third conductive wires and located at the second driving IC mounting area GDR (Fig. 13(a)).

Re claim 3, the surface of the substrate SUB1 comprises a plurality of testing pads DLTP and GLTP connected to the one end of the first, the second, and the third shorting bars, which is for inputting the detected signal to the first, the second, and the third shorting bars to perform a liquid cell test (Fig. 2; col. 13, lines 6-30).

Re claim 4, the first and the second conductive wires are data lines, the third conductive wires are scanning lines (Fig. 6), and when the liquid crystal cell test is completed with the cut line LCT1 (Fig. 15(a)), the first and the second shorting bars C8, C6 are used to connect to the first driving ICs in series as shown in Figs. 22(a)-22(f).

Re claim 5, as shown in Fig. 13(a), the liquid crystal display panel further comprises a plurality of fourth conductive wires parallel to the third wires used as a scanning line and for receiving the signal from the second driving IC GDR; and

a fourth shorting bar C2 connected to the fourth conductive wires installed at the second driving IC mounting area GDR.

Re claim 6, the substrate SUB1 comprises a plurality of the second driving IC mounting areas GDR, and the third and the fourth shorting bars C3 and C2 pass through the second driving IC mounting areas GDR, and when the liquid crystal cell test is completed with the cut line LCT1 (Figs. 1, 2 and 13(a)), the third and the fourth

shorting bars C3 and C2 are used to connect to the second driving IC in series as shown in Figs. 21(a)-21(f).

Re claim 7, as shown in Figs. 15(a), the liquid crystal display panel further comprises a plurality of fifth conductive wires (vertical lines B1) parallel to the first and the second conductive wires used as data lines and for receiving the signal from the first driving IC DDR, each first conductive wire R1 transmitting a red image signal, each second conductive wire G1 transmitting a green image signal, and each fifth conductive wire B1 transmitting a blue image signal (col. 18, lines 27-42); and a fifth shorting bar C4 connected to the fifth conductive wire B1 and located at the first driving mounting area DDR, and when the liquid cell test is completed with the cut line LCT1 (Fig. 15(a)), the fifth shorting bar C4 is used to connect the first driving ICs in series as shown in Figs. 22(a)-22(f).

Re claim 9, as shown in Figs. 1 and 2, the surface of the substrate SUB1 includes a plurality of second driving IC mounting areas GDR, and all of the third shorting bars C3 pass through the second driving IC mounting areas GDR, and when the liquid crystal cell test is completed with the cut line LCT1 (Fig. 13(a)), the third shorting bar C3 is used to connect the second driving ICs in series as shown in Figs. 21(a)-21(f).

Re claim 8, if each first and second conductive wire are scanning lines connected to the first and second shorting bars C3 and C2 as shown in Fig. 13(a) and every third line is a data line as shown in Fig. 15(a), and when the cell test is completed with the

cut line LCT1, the first and the second shorting bars C3 and C2 are used to connect the first driving ICs in series as shown in Figs. 22(a)-22(b).

Re claim 10, the liquid crystal display panel includes another plurality of first bounding pads TTB located on the first and the second shorting bars C8 and C6 between two neighboring first driving IC mounting areas DDR for electrically connecting a first flexible printed circuit FPC2 to the first and the second shorting bars between the two neighboring first driving IC mounting areas DDR, wherein the first flexible printed circuit is for inputting a signal to the first driving IC DDR as shown in Figs. 1, 10 and 15(b).

Re claim 11, the surface of the liquid crystal display includes a plurality of the second driving IC mounting areas GDR, and the liquid crystal display comprises a plurality of second bounding pads TTA located on the third shorting bars C1-C3 between two neighboring second driving IC mounting areas GDR for electrically connecting a second flexible printed circuit FPC1 to the third shorting bars between the two second driving IC mounting areas GDR, wherein the second flexible printed circuit is for inputting a signal to the second driving ICs GDR as shown in Figs. 1, 10 and 13(b).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi V. Duong – Primary Examiner

September 12, 2007

A handwritten signature in black ink, appearing to read "Thoi V. Duong", written in a cursive style.